Cat. No. **25-4091**

User's Guide

VGM-390
RGB Analog Monitor

TANDY®

INTRODUCTION

Your VGM-390 RGB Analog Monitor is a high-resolution color monitor designed to display characters and graphics in an unlimited number of vivid colors. Its features include the following:

- Non-interlaced, flicker-free display for the best viewing.
- Compatible with a wide variety of video standards including VGA, Super VGA, and 8514/A.
- 14-inch color display for larger, eye-catching graphics.
- 0.39 mm dot pitch provides sharp detail.
- Brightness and contrast controls that let you adjust the picture to suit the room's lighting.
- RGB analog signal system for crisp characters and sharp color graphics.

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FCC NOTICE

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the monitor and the radio or TV.
- Use outlets that are on different electrical circuits for the equipment and the radio or TV.

Consult your local Radio Shack store or an experienced radio/TV technician if the problem still exists.

You must use shielded interface cables with this monitor.

Modifying or tampering with the monitor's internal components can cause a malfunction and might invalidate the warranty and void your FCC authorization to use the monitor.

This monitor is made and tested to meet exacting safety standards. It meets both UL and FCC requirements.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

This symbol is intended to alert you to the presence of dangerous voltage inside the product that can cause shock. Do not open the product's case.

This symbol is intended to alert you to important operating and maintenance instructions in this owner's manual.

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN!

For your permanent records, we recommend that you write the serial number of your monitor in the space provided. You will find the serial number on the monitor's back panel.

Serial number: _____

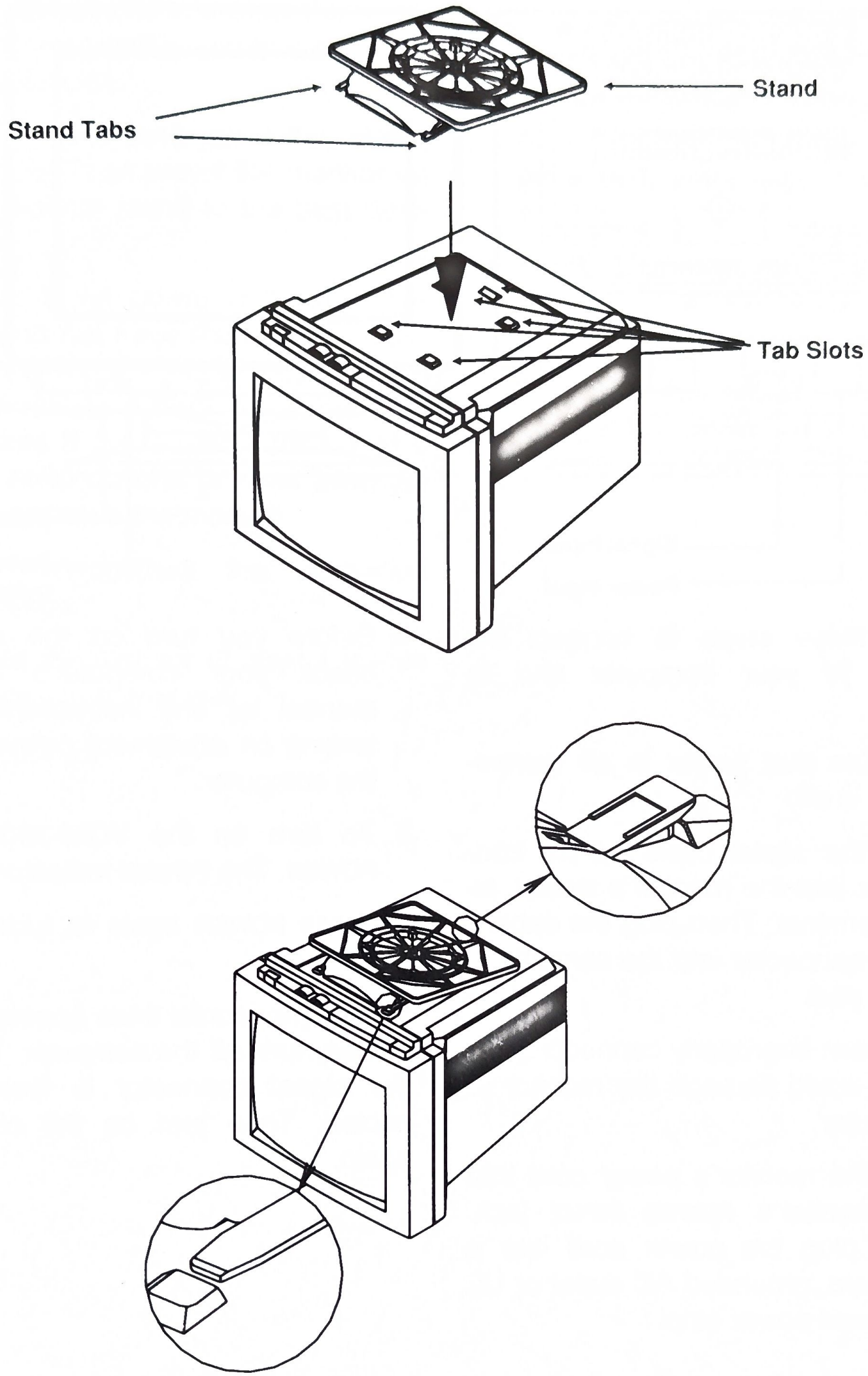
INSTALLING THE STAND

The special, tilt/swivel stand included with your VGM-390 lets you tilt or turn your monitor to a position that is comfortable for you.

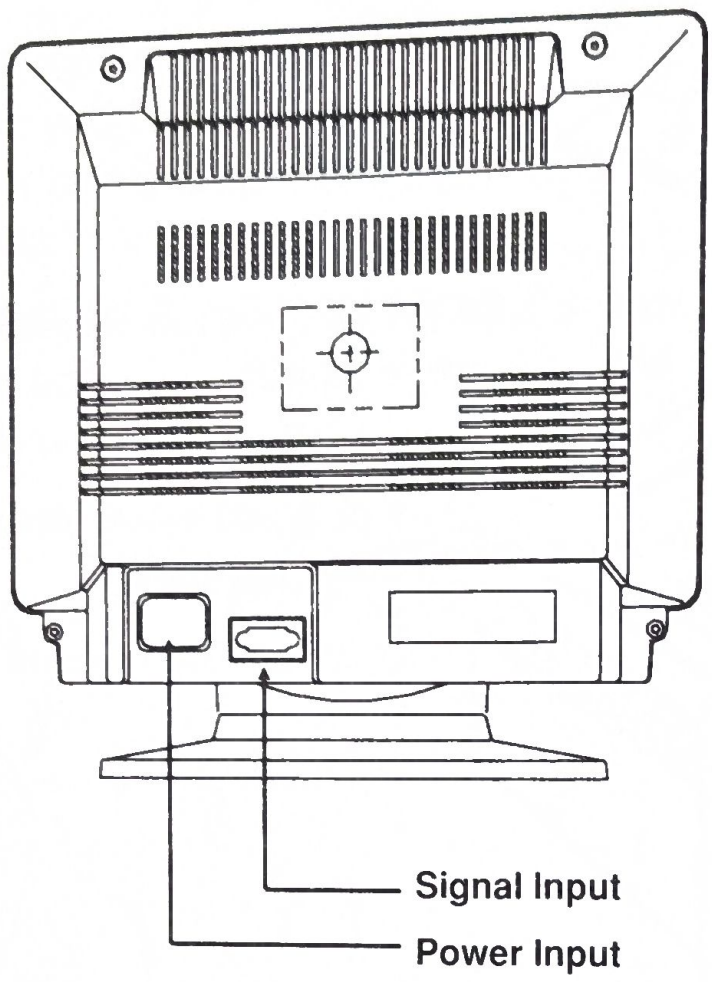
Caution: Before you install the stand, be sure the monitor's power cord is unplugged.

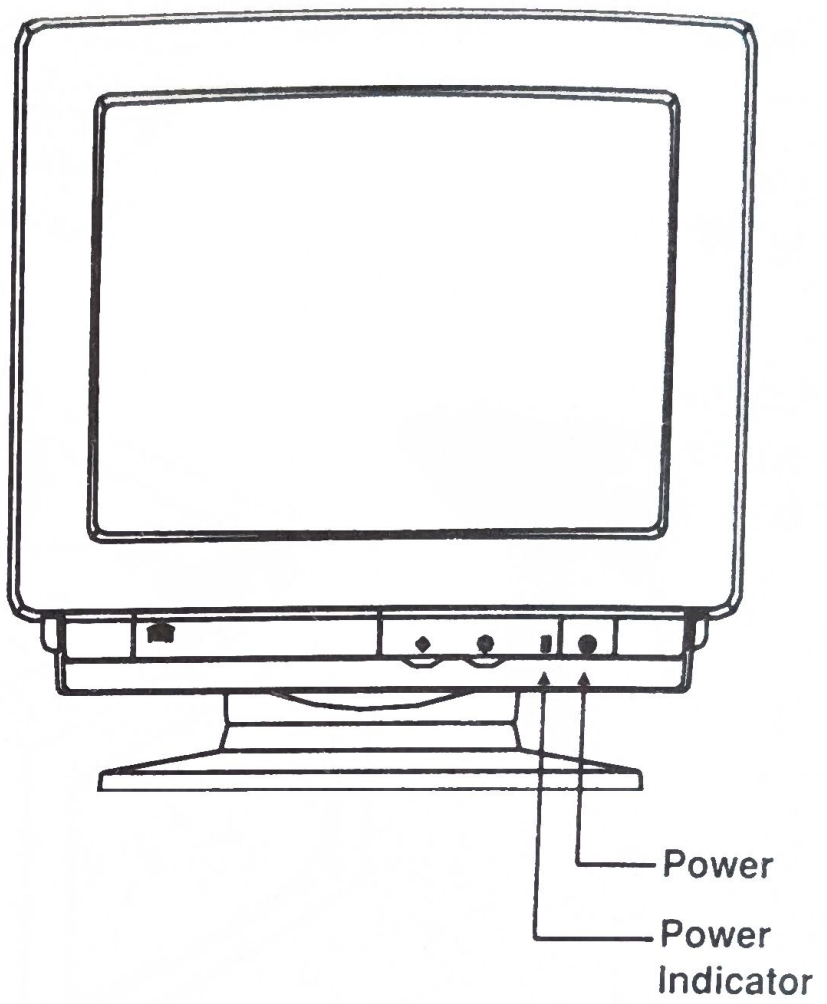
Follow these steps to install the stand.

1. Turn the monitor upside down with the screen facing you.
2. Turn the stand upside down and place it on the monitor.
3. Insert the four stand-tabs into the four slots on the bottom of the monitor's chassis.
4. Push down the stand. Then, pull the stand toward you until it snaps into place. Turn the monitor and the stand upright.


Stand
Stand Tabs
Tab Slots

CONNECTING TO YOUR COMPUTER AND TO POWER





Follow these steps to connect the monitor to your computer and to power.

1. Be sure that power to all components is off.
2. Plug the signal cable's 9-pin connector into the monitor's **SIGNAL INPUT** terminal. Then plug the cable's other connector into the computer's video port.

   Caution: Improperly connecting the cable could damage the monitor or computer.
3. Plug the monitor's power cord into the monitor's **POWER INPUT** jack. Then plug the power cord into a standard, grounded AC outlet or UL approved power strip.
4. Before you turn on the monitor, check your computer's owner's manual for any instructions about turning on equipment connected to the computer.
5. To turn on the VGM-390, press **POWER**. The **POWER** indicator lights.
6. Press **POWER** again to turn off the monitor.

Note: If horizontal lines appear on the screen, turn off the computer. Be sure the signal connector is firmly connected. Then turn on the computer again.

SETUP HINTS

Follow these hints to protect the monitor from overheating and to provide reliable operation.

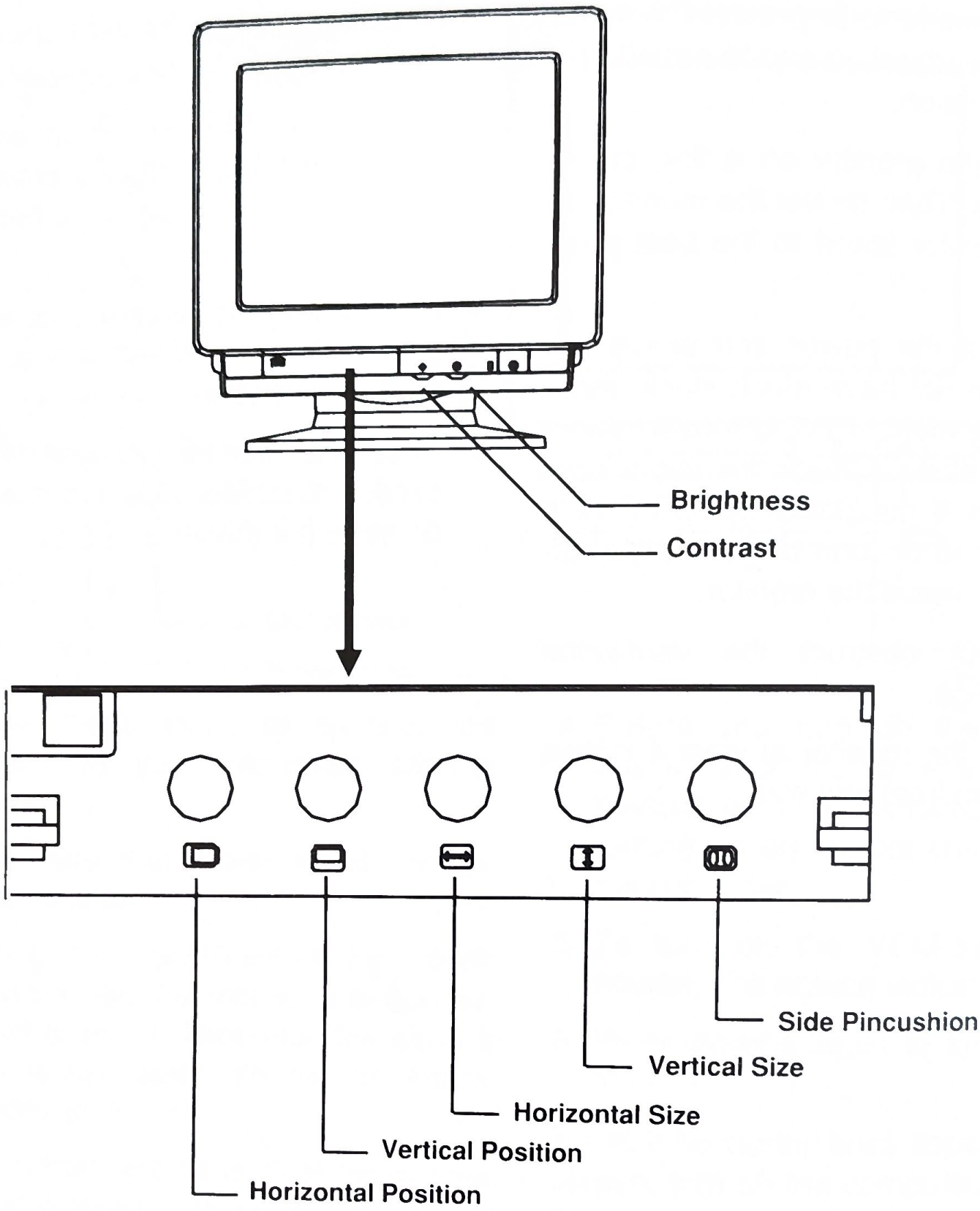
- Place the monitor on a flat, stable surface. Then swivel the monitor on the monitor stand to the best position.

  Note: If the power and signal cables do not have much slack, moving the monitor could loosen these connections. Check the cable connectors if the power turns off or if the video distorts or goes away after you move the monitor.

- Do not obstruct the ventilation openings.
- Install the monitor at least 4 inches (10 cm) from any wall.
- Never place the monitor near or over a radiator or heat register.
- Never block the openings on the bottom of the monitor by placing it on a bed, sofa, rug, or other soft surface.
- Place the monitor in a built-in enclosure only if the enclosure has proper ventilation.
- Keep the monitor dry and free of excess dust. Moisture and dust can damage the monitor.

ADJUSTING THE DISPLAY

FRONT VIEW



ADJUSTMENTS

Contrast

Adjust this control for the proper contrast level.

Brightness

Adjust this control for overall brightness of the display screen.

Caution: If the same characters or graphics are shown for a long time with the contrast and brightness controls set to their maximum positions, part of the screen might be damaged. Use these controls with care.

Horizontal Position

Adjust this control to horizontally position the display. Turn **H-POSI** clockwise to move the display to the right or counterclockwise to move it to the left.

Vertical Position

Adjust this control to vertically position the display. Turn **V-POSI** clockwise to move the display up or counterclockwise to move it down.

Horizontal Size

Use this control to adjust the display's width. Turn **H-SIZE** clockwise to widen the display or counterclockwise to narrow it.

Vertical Size

Use this control to adjust the display's vertical size. Turn **V-SIZE** clockwise to increase the display's vertical size or counterclockwise to decrease it.

Side Pincushion

Adjust this control to correct the display's vertical lines from bowing in or out. Turn **SIDE-PIN** clockwise to *barrel* the display's vertical lines or counterclockwise to *dent* them.

SAFETY INFORMATION

- Operate the monitor from the power source indicated on the back of the cabinet. Using a different power source can cause the monitor to operate improperly and might damage the monitor.
- To ensure safe operation, you must insert the monitor's three-pin plug into a grounded standard three-pin outlet.

  Use only three-wire extension cords that are correctly wired to provide connection to ground. Improperly wired extension cords are a major cause of fatalities.

  The fact that the equipment operates satisfactorily does not ensure a grounded power point or a completely safe installation. For your safety, consult with a qualified electrician if there is any doubt about the effective grounding of the power point.
- To prevent a fire or electric shock, do not overload wall outlets and extension cords.
- Adjust only those controls that are described in the section "Adjusting the Display." Improper adjustment of other controls can result in damage that will require the service of a technician.
- Do not allow anything to rest on the power cord. The cord should not stretch across a hall or any other high-traffic area.
- Unplug the monitor from the AC outlet if you do not plan to use it for an extended period of time, such as during a weekend or vacation.
- To prevent electric shock and other hazards, do not remove the monitor's back cover.
- Do not drop or push objects into the cabinet openings. Some internal parts carry hazardous voltage, and contact with these parts can result in electric shock.
- Never spill a liquid of any kind on the monitor. If liquid is accidentally spilled on the monitor, unplug it and have it checked by a Radio Shack service technician before using it again.

CARE AND MAINTENANCE

Your monitor should give you years of trouble-free service if you connect it to the proper power source and handle it gently, and if you care for it as described here. If the monitor malfunctions, have it checked by a qualified Radio Shack service technician.

CARE TIPS

- Keep the monitor dry and free of excess dust. Moisture and dust can damage the monitor.
- Never leave the monitor in contact with rubber or vinyl for an extended period of time as this may cause the rubber or vinyl to stick to the monitor's cabinet.

CLEANING THE MONITOR

Always unplug the monitor before you clean it. Wipe the screen and cabinet with a soft cloth. If the screen requires more than dusting, use a household window cleaner and a soft cloth.

Caution: Do not use benzene, thinner, or any volatile substance to clean the monitor. Such substances can permanently mar the finish.

Occasionally, the internal parts of the monitor need to be cleaned to prevent damage caused by dust particles. We recommend that you take the monitor to a Radio Shack store for a yearly cleaning.

TECHNICAL INFORMATION

The information in this section has been provided for reference only.

D-SUB SIGNAL INPUT (FEMALE)

The supplied 9-to-15 pin cable connects the computer's 15-pin VGA video port connector to the monitor's 9-pin D-SUB connector. The following table lists the functions of the monitor's 9-pin connector.

Pin Assignments	Signal
1	Red
2	Green
3	Blue
4	H-SYNC
5	V-SYNC
6	GND-R
7	GND-G
8	GND-B
9	GND-SYNC

VIDEO INFORMATION

This chart shows horizontal and vertical sync levels, horizontal and vertical frequencies (FH and FV), resolution, and whether the mode is interlaced (I) or non-interlaced (NI).

	H-Sync	V-Sync	FH/FV	Resolution	Mode
VGA1	POS	NEG	31.5 kHz/70 Hz	640 x 350	NI
VGA2	NEG	POS	31.5 kHz/70 Hz	640 x 400	NI
VGA3	NEG	NEG	31.5 kHz/60 Hz	640 x 480	NI
8514/A	POS	POS	35.5 kHz/87 Hz	1024 x 768	I
VESA/VGA	NEG	NEG	37.8 kHz/72 Hz	640 x 480	NI
SVGA/56 Hz	POS/NEG	POS/NEG	35.1 kHz/56 Hz	800 x 600	NI
SVGA/60 Hz	POS	POS	37.9 kHz/60 Hz	800 x 600	NI

SPECIFICATIONS

Display Size	14 Inches, 90°
Display Screen Type	Non-Glare
Display Dot Pitch	0.39 mm
Input Video Signal	Analog 0.7 V p-p
Input Sync Signal	TTL-Level
Video Bandwidth	45 MHz (Maximum)
Impedance	75 Ohms ±5% (Positive Terminated)
Maximum Resolution	1024 × 768
Displayable Colors	Unlimited Capability
Heat Output	258 BTU/Hour
Operating Temperature	32 to 95°F (0 to 35°C)
Storage Temperature	–4 to 140°F (–20 to 60°C)
Input Voltage	115 – 220 VAC, 50/60 Hz
Power Consumption	80 Watts (Maximum)
Dimensions	$14\frac{5}{16}$ x 14 x 15 Inches (362.5 x 356 x 380 mm) (HWD)
Weight	25 Lbs 6 Ounces (11.5 Kg)

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